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Eclipse of the Sun, 1882, *May* 16.

Beginning and Ending of the Eclipse.

1882.		Phenomenon.	Telescope.	Power.	Mean Solar Time of Observation.	Obs.
					h m s	
May 16		First contact	S.E. Eq.	500	18 11 15·24	W.C.
	(*a*)	„	Altaz.	120	18 11 27·11	A.D.
		Last contact	S.E. Eq.	500	19 23 13·43	W.C.
	(*b*)	„	Altaz.	120	19 23 8·55	A.D.
		„	E. Eq.	70	19 23 9·25	M.
		„	N. Eq.	220	19 23 1·42	L.

Notes.

(*a*) Observation satisfactory. (*b*) Observation pretty accurate.

During the eclipse the following observations were made with the S.E. Equatorial:—

From 18			

The clear aperture of the object-glass of the S.E. Equatorial is 12$\frac{3}{4}$ inches, of the E. Equatorial 6$\frac{3}{4}$ inches, of the Altazimuth 4 inches, and of the N. Equatorial 4·1 inches.

The initials W.C., A.D., M., T., L., H., H.P., H.C., are those of Mr. Christie, Mr. Downing, Mr. Maunder, Mr. Thackeray, Mr. Lewis, Mr. Hollis, Mr. H. Pead, and Mr. Cox.

Royal Observatory, Greenwich:
1883, *January* 20.

Observation of Comet a, 1883, *made at the Royal Observatory, Greenwich.*

(*Communicated by the Astronomer Royal.*)

The observation was made with the East or Sheepshanks Equatorial, by taking transits over two cross wires at right angles to each other, and inclined 45° to the parallel of Declination.

Green. Mean Solar Time.	Obs.	☄ − ✱ R.A.	☄ − ✱ N.P.D.	No. of Comp.	Apparent R.A.	Apparent N.P.D.	Star.
d h m		m s	′ ″		h m s	° ′ ″	
Mar. 8 9 0	H.	+0 11·0	−2 58·96	1	0 59 56·62	58 23 36·81	*a*

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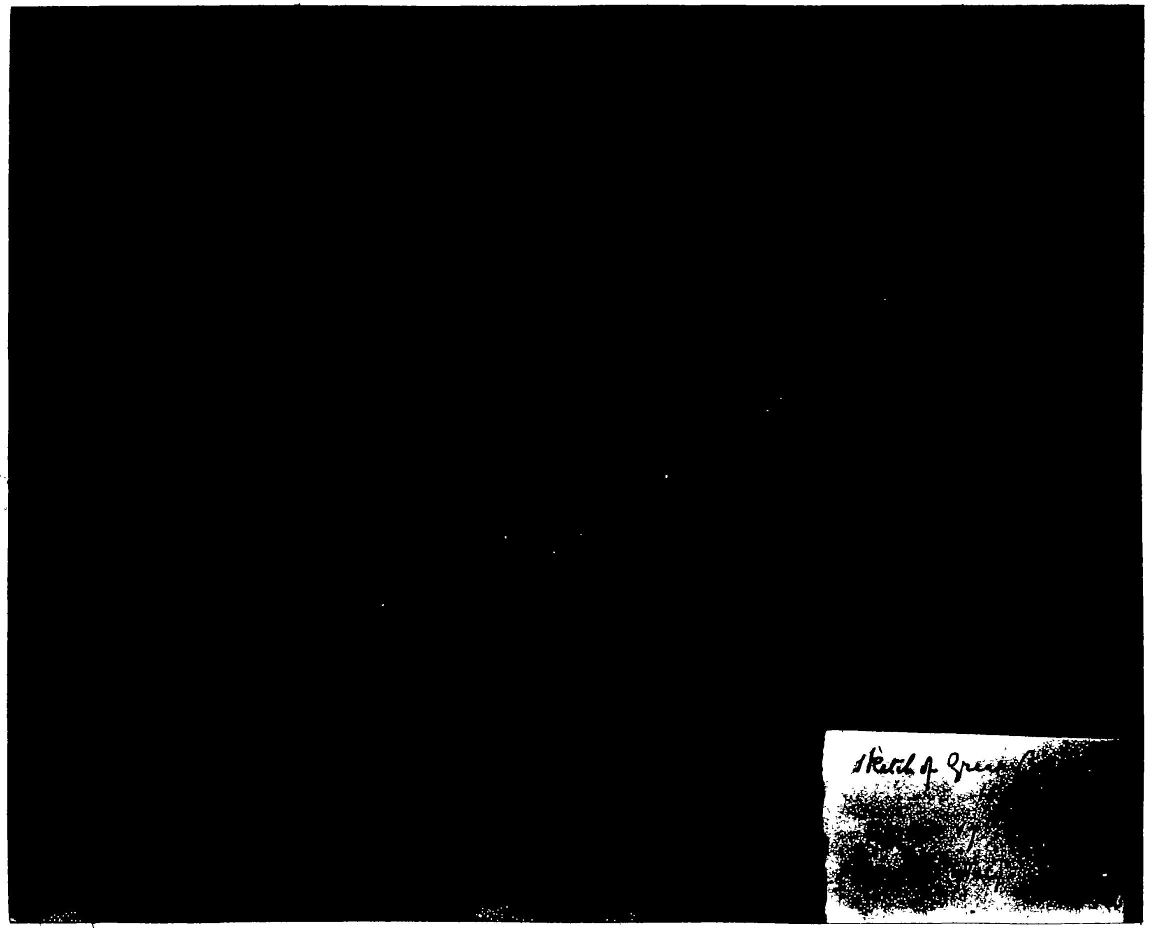
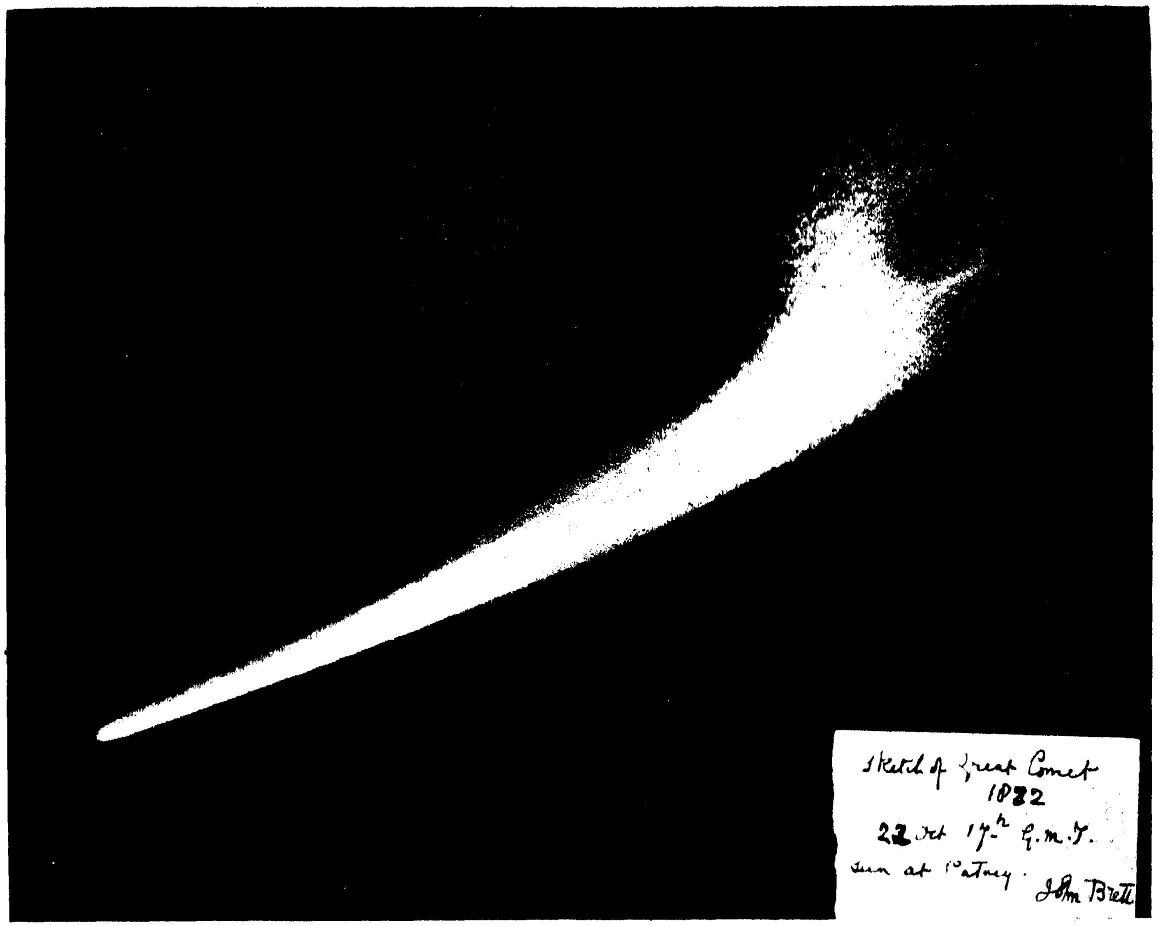


SKETCH OF THE GREAT COMET (*b*), 1882.

BY JOHN BRETT.

October 22. 17*h*., G.M.T.



Sketch of Great Comet
1882
22 Oct 17h G.m.T.
seen at Putney. John Brett

SKETCH OF THE GREAT COMET (*b*), 1882.

BY JOHN BRETT.

1883MNRAS..43..288B

Mean Place of Comparison Star.

Star.	Star's Name.	R.A. 1883·0.	N.P.D. 1883·0.	Authority.
		h m s	° ′ ″	
a	σ^2 Piscium	0 59 45·24	58 26 40·50	Green. Cat. 1872.

Note.—The sky clouded immediately after the comet was found; only one comparison could be obtained.

The observation is not corrected for refraction or parallax.

Royal Observatory, Greenwich:
1883, *March* 9.

Observations of the Great Comet (b) 1882, *made at Grahamstown, Cape of Good Hope.* By L. A. Eddie.

The comet was first observed on September 13 at 4.50 A.M. It had then just risen above the horizon, and appeared in the strong twilight as a brilliant but narrow band of ruddy light, terminating in a very bright nucleus, equalling *Jupiter* in brilliancy and apparent size. The tail was slightly inclined to the north, but seemed to have no curvature. It could be traced to about 12° from the nucleus. When viewed through my $9\frac{1}{2}$-inch Calver, it appeared as an extremely bright and well-defined nucleus of a solid appearance, and shining with a light quite equal to that of *Venus*, but of a light golden hue; it was surrounded by a dense coma of a ruddy-brown tinge; there was no appearance of envelopes, and its periphery was very sharply defined. The nucleus seemed to contract as the daylight increased until it reached a limit where the still increasing light had no further diminishing effects on its size. This would seem to indicate a very dense centre to the nucleus.

September 15.—Morning clear. Head of comet rose at 5.3. The nucleus shone as bright as *Jupiter*, but no important details of physical structure were observed. The nucleus could be seen with the naked eye up to 5.40.

September 16.—The comet rose at 5.15. In the telescope the nucleus appeared less sharply defined on its preceding boundary, and the breadth of the coma was greater on the northern side than on the southern. The tail seemed to spread out for a short distance behind the comet, and it was darker in the centre, as if split open.

September 17.—The comet rose at 5.44, about 14 minutes before the Sun. It had increased still more in size and brilliancy. The head and tail, about 8′ in length, shone with intrinsic lustre. It was not to be eclipsed by the sunlight to-day at all, but continued to shine during the whole day as a bright attendant to the Sun, of 1° in length, and in which the cometary form was plainly discernible. So apparent was it to the naked eye, that one had but to look in the direction of the Sun when it could immediately be seen without any searching. However, as the day advanced it approached the Sun so very rapidly that at